INTERACTIVE AUDITOR-CLIENT NEGOTIATIONS: INVESTIGATING THE ROLES OF BLAME AND CONSERVATISM

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ABSTRACT

In this study we consider how social interactions that occur during negotiations between auditors and their clients can impair compliance with regulatory guidance regarding the posting of material misstatements. Specifically, we consider how the direction and accumulating nature of misstatements influence agreed upon adjustments to the financial statements. To test the effect of these characteristics, we construct experimental dyads consisting of audit partners and financial officers, allowing them to interact via a web-based instrument, to reach a mutually agreed upon audit adjustment. As predicted, these misstatement characteristics alter the positions of the negotiators and negotiated outcomes. Specifically, auditors impound a sense of blame when negotiating accumulated audit differences, given their role in passing on adjustments in the past, leading to smaller agreed-upon adjustments. Further, dyads determine smaller adjustments when considering an income increasing, versus decreasing, difference due to financial officers’ perception of auditors’ lack of concern over income increasing adjustments. Additionally, we describe the content of the communications between auditor and client management participants to demonstrate how these parties strategically use the manipulated differences in the negotiation context in efforts to persuade the other party. Finally, we provide evidence that this interactive setting provides different inferences than would be obtained from a traditional, non-interacting, experimental setting.
I. INTRODUCTION

This study considers how behavioral influences during the social interactions between auditors and their clients while resolving potential audit adjustments predictably diminish regulatory guidance with regard to potential material misstatements. These interactions represent a fundamental component of the audit process and significantly contribute to auditor/client relationships as well as audit quality (Gibbins et al. 2001). Given the interactive nature of this negotiation process, prior research has predominantly relied on Social Psychological Theory (i.e., phenomenon related to how individual judgments and persuasion attempts affect the behavior of other individuals). However, research methods have generally only considered one side of the interaction, potentially missing fundamental insight into how these interactions affect outcomes (Salterio 2012). The current study constructs experimental dyads consisting of auditors and financial officers, allowing them to interact via a web-based instrument to address our research questions. Specifically, we examine how, in an auditor-client negotiation setting, the accumulating nature and income direction of a material misstatement alter the positions of the negotiators and alter negotiated outcomes. Additionally, because of our dyadic-based approach we capture novel, qualitative evidence relating to the interactive, social nature of negotiations.

The SEC issued SAB 108 in 2006 to address two concerns—(1) the diversity in practice with respect to quantifying financial statement misstatements and (2) the potential for improper amounts to accumulate on the balance sheet. While this guidance provides clear and consistent interpretation of when a misstatement is material, we predict that this application of materiality will be influenced by the auditor-client negotiation process. That is, a materially large misstatement on the balance sheet could exist due to its occurrence in a single period or could accumulate over several periods where the misstatement went uncorrected. Negotiation research
suggests that the nature of accumulated misstatements may engender responsibility in the auditor for their prior decisions to waive differences and an expectation in the client that an adjustment will not be required if the accounting issue comes up again in the future. Consequently, we predict that the process by which auditors and their clients negotiate will differ, resulting in smaller agreed-upon adjustments when a misstatement accumulated over time rather than occurred mostly in a single period.

Concerns over using principles of conservatism to create “cookie jar” reserves (e.g., Levitt 1998) led to the removal of language regarding conservatism from the conceptual framework of the Financial Accounting Standards Board and the International Accounting Standards Board. Nevertheless, archival research finds that firms continue to manipulate reserve accounting (e.g., allowance for doubtful accounts) to manage future earnings (e.g., Canace et al. 2016, Hope et al. 2013, Jackson and Liu 2010). Auditors are adept at recognizing instances of overstated reserves (Canace et al. 2016), thus, normative auditor behavior should be to require adequate adjustments to deal with potential cookie-jars. However, vestiges of conservatism likely minimize the contention with which auditors approach negotiations over income increasing adjustments. Additionally, income increasing adjustments provide client management leverage for an argument against adjustment due to lower perceived risk/importance. Taken together, we predict that when the correction of a misstatement increases, rather than decreases, income, auditor-client management dyads will negotiate a smaller adjustment.

Negotiations between auditors and client management about the disposition of misstatements uncovered during the audit are quite common (Gibbins et al. 2001), affecting account values in audited financial statements (e.g., Brown and Wright 2008) and providing a crucial link between audit quality and financial statement quality (Hatfield et al. 2010). Beyond
improving our understanding of how the accumulation and direction of misstatements influences negotiated outcomes, we add to the negotiation literature by allowing auditors and client management to interact directly. Prior research has not attempted to bring these two groups of participants together, presumably due to the difficulty of eliciting joint participation of two such high-level participant pools (Salterio 2012). That is, research considering each group separately allows researchers to collect data efficiently in a single instrument, to make the most efficient use of these participants’ time (e.g., Sanchez et al. 2007, Tan and Trotman 2010). Kachelmeier (2018) points out that research on auditor/client interactions has, to date, not considered actual interactions, and that aspects of these interactions likely will affect outcomes.

To address this shortcoming in the literature, we develop a web-based instrument that provides for negotiation of an accounting issue between auditor and client management (financial officers) participants. Auditor participants were provided the audit team estimate for the allowance for doubtful accounts, indicating an audit difference, and then communicated directly with the client regarding the issue. Specifically, auditors provided a proposed adjustment amount and their rationale for adjustment. These communications contained information such as financial statement observations and assumptions the auditor relied on in determining their estimate as well as persuasive argumentation to convince client management of the adjustment. Client management participants then responded to the auditor with a counter-offer and rationale. This process went back and forth (max 5 rounds) until the pair reached a negotiated outcome.

Our results are consistent with predictions, in that negotiated adjustments are lower for misstatements that accumulated over time (the past five years) compared to a non-accumulated misstatement. Mediation analysis demonstrates that when a misstatement accumulated over multiple years, the auditor perceived more blame for allowing the misstatement to accumulate,
resulting in smaller agreed-upon adjustments. Additionally, when the accumulated misstatement necessitates an income increasing adjustment, relative to an income decreasing adjustment, the negotiated adjustment was smaller. Again, mediation analysis provides a causal explanation for this result. Specifically, client management participants indicated that their auditor would place lower priority on income increasing adjustments, compared to income decreasing, leading to smaller adjustments.

Interestingly, our interactive method provides results different than what would likely be found using traditional “one-sided” analysis. For example, Hatfield et al. (2010) run a computer simulated negotiation and find that auditors stuck to their initial offer (no concession during the negotiation) 76% of the time. They comment that this is consistent with anecdotal evidence and prior research (Bame-Aldred and Kida 2007; Ng and Tan 2003), that auditors concede less than other negotiators in different settings likely due to limitations of professionalism. While we have a different negotiation issue in the current study, we find that dyads determine an adjustment equal to the auditors’ initial proposal amount in only 19% of the cases. This suggests that holding firm is more difficult when an interaction becomes real, and a human counterpart is involved in the negotiation. That is, negotiation-relevant constructs, like reciprocating concessions, are social constructs, and as such are more powerful during social interaction. Additionally, we collect pre-negotiation measures, consistent with the primary dependent variables in most previous negotiation studies (i.e., auditors’ opening adjustment, expected outcome, minimum required adjustment). Inferences from pre-negotiation measures are consistent with our dyadic negotiated outcomes for hypothesis 1 but are contrary to negotiated outcomes for hypothesis 2. In other words, when we allow the auditor and client management to interact, outcomes provide different inferences than what we would find if using tradition pre-
negotiation measures. Together, we believe these analyses provide convincing evidence that the interactive process is a significant component of auditor-client negotiations and should be an important design consideration of academic research.

Finally, our data collection technique provides extensive textual information related to auditors and client management attempts to persuade the other regarding their proposed adjustment. We find that, in addition to the facts they focus on to make their points, they use strategic arguments designed to push their advantage (e.g., client management stating that past adjustments were always waived) or to deal with any disadvantage (e.g., auditors preemptively describing why this period’s adjustment is different from prior periods). We examine these interactions in a qualitative discussion of our textual data, which provides insights into the negotiation process and is consistent with the theoretical underpinnings of our hypotheses.

The results of our analyses provide unique insight into how social aspects of negotiation influence outcome. Note that income direction had no significant effect on auditors’ pre-negotiation expectations (e.g., first offer or expected outcome) but did influence the negotiated outcome. Thus, auditors anticipated adjustment magnitude is consistent across income direction (i.e., normative audit behavior), but the social interaction with client management then significantly influenced their behavior. This conclusion is bolstered by the fact that the negotiated result is mediated by client management’s differing perceptions of adjustment importance, across income direction, but not auditors’ perceptions. That is, client management assume that auditors are less concerned with correcting income increasing, versus, decreasing misstatements, and then strategically (and successfully) leverage this assumption during negotiations with the auditor. We also find support for this conclusion when looking at qualitative data, where management often effectively pushed the idea that, in the income
increasing condition, the current balance was conservative. For example, in explaining why they reduced their proposed adjustment amount, one auditor (A122) stated, “the client's argument made a lot of sense: they were over-allowed which is conservative…” This collection of findings around the effect of income direction provides explanation for why auditors may allow a smaller adjustment even when they seem to prefer a larger adjustment and how the social aspect of the negotiation process influences this change in allowed adjustment.

We contribute to the literature in two significant areas. First, results demonstrate that the negotiation process likely has a significant effect on the extent that adjustments are made when audit differences arise through the buildup of small differences—a consideration directly addressed by SAB 108 in an effort to reduce misstated balance sheet accounts, particularly with regard to “cookie jar” reserves. While regulators and examples from practice suggest the importance of requiring income increasing adjustments (Canace et al. 2016), our findings indicate conservatism finds its way back into the audited financial statements through the negotiation process. Overall our findings suggest that behavioral influences may diminish the intent of accounting/auditing regulatory guidance on audited financial statements. Second, we demonstrate a new method to auditor/client negotiation research that allows for actual interaction between participants while still being sensitive to the time demands of professionals like audit partners and financial officers. Further, we demonstrate that a method allowing social interaction can produce different findings from research based only on behavioral intentions, when there is no actual interaction between participants.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Negotiations between auditors and client management (ACM negotiation) have been well documented (e.g., Gibbins et al. 2001; Salterio 2012) and are the process by which auditors
influence the content of the reported financial statements. Consequently, financial statements, though prepared by management, are a joint product of management and their auditor (Antle and Nalebuff 1991). ACM negotiation literature has studied a variety of process and contextual characteristics that influence the expected negotiated outcomes of the auditor or management. For example, a common process consideration is the planned strategic approach taken by the auditor (e.g., Trotman et al. 2005; Bame-Aldred and Kida 2007; Sanchez et al. 2007; Hatfield et al. 2008; Tan and Trotman 2010; Perreault et al., 2017). Similarly, examples of specific contextual characteristics that have been considered include magnitude (Hatfield et al. 2010), deadline pressure (Bennett et al. 2015), engagement risk (Johnstone et al. 2002), and audit committee effectiveness and authoritative guidance (Ng and Tan 2003). Overall, this literature suggests that negotiations directly impact audit quality and financial reporting quality, and affect the working relationship between clients and auditors.

One shortcoming of the negotiation literature is that while the underlying research questions and theory are steeped in social psychology which provides predictions based on how individuals are affected by others, this research makes inferences about how auditors and their clients interact without allowing these parties to interact (Kachelmeier 2018). There are at least two related methodological considerations that prior research generally has not addressed. First, in social psychology based research, experimental realism (i.e., the extent to which the experimental situation is real and impactful to the participant; Aronson and Carlsmith 1968) can be used to improve both construct validity by better matching theory to constructs as well as internal validity by strengthening the manipulations (Morales et al. 2017; Hatfield and Saiewitz 2019).¹ As a singular example in the literature, Trotman et al. (2005) provide experimental

¹ For example, the introduction of accountability, a fairly simple and fundamental social psychological construct, into accounting decisions influenced researchers’ findings (e.g., Johnson and Kaplan 1991; Kennedy 1993).
realism by having their participants interact with an actor. While still only considering the actions of the auditor, they use actual interaction (increased experimental realism) to measure auditors’ negotiation behavior, as opposed to pencil and paper based measures or computer simulations. Secondly, as Kachelmeier (2018) and Salterio (2012) point out, interactions such as negotiations are a function of each party reacting to the other party, such that negotiated outcomes are a complicated result of the strategies and persuasiveness of both sides, and how each side reacts to the other.

This study is, in part, a response to this call for researchers to create an interactive environment in which to study an interactive phenomenon. Clearly, in an ACM negotiation context where both parties to the interaction are highly experienced and quite important within their organizations (audit partners and financial officers), obtaining their time and effort is extremely difficult (Salterio 2012). Given the additional difficulty of getting them together to participate in an experiment at the same time and place, it is easy to understand the absence of interactive negotiation research. To overcome these obstacles, we created a web-based interactive software that allows our participants to interact in real time, electronically, to explain their positions, react to their counterpart’s persuasive attempts and strategies, and revise their own position over multiple rounds of negotiations. We view this methodological advancement, discussed more specifically in the Methods section, to be a significant contribution to the auditor-client interaction literature, including ACM negotiation research.

**Accumulated Audit Differences**

Nelson et al. (2005) demonstrate that auditors are more or less willing to waive adjustments based on how they occurred. That is, a non-material difference on the income statement that has accumulated to be a material misstatement on the balance sheet may be waived using the “current period” approach as the current year item is not materially misstated.
Subsequently, the SEC released Staff Accounting Bulletin No. 108 (SAB 108), which requires immediate correction of accumulated misstatements on the balance sheet (i.e., both the current period and rollover approach must be considered in determining materiality of misstatements). Save investor reaction to the implementation of SAB 108 (e.g., Omer et al. 2012), little research has considered how auditors and/or their clients react to misstatements that have accumulated over time versus misstatements that occurred primarily in a single period. Keune and Johnstone (2009) provide descriptive evidence on the nature, direction, and magnitude of accumulated adjustments required pursuant to SAB No. 108. They find that while prior research suggests reserves are a pervasive area for accumulated misstatements (Houghton and Fogarty 1991; Nelson et al., 2002), it was not a common area for SAB 108 adjustments. Jackson and Liu (2010) find that firms in their sample repeatedly overstate the allowance for doubtful accounts over time, resulting in materially overstated allowances on balance sheets while Canace et al. (2016) demonstrate a lack of correction in these overstatements post SAB 108. These findings suggest that it is important to consider how and why regulatory guidance in SAB 108 may not be fully recognized in the financial statements.

**Auditors and Anticipatory Regret**

As stated above, current accounting regulations do not allow for a material misstatement to accumulate on the balance sheet (e.g., immaterially large or small bad debt expenses accumulating into a materially misstated allowance for doubtful accounts). However, when a materially large misstatement is identified, we predict that the timing of its development will alter how both parties negotiate over its disposition. Consider a balance sheet account that is materially misstated. If the majority of that misstatement is a result of transactions in the current year, the auditor will likely view this as predominantly the responsibility of management. If however, the misstatement is the result of the accumulation of immaterially small amounts that
built up over the previous years, the auditor may feel some responsibility for prior decisions to not require adjustments on the smaller amounts (e.g., Hatfield et al., 2011). If the auditor ascribes internal attributions to a negative outcome (e.g., misstatement) he or she will focus more on negative emotions like guilt or fault (Harvey and Martinko 2009).

When individuals avoid actions that they perceive will result in harmful consequences, they exhibit a behavior known as anticipatory regret (Landman 1993; Kunda 2000). Consistent with anticipatory regret, Bennett et al. (2015) demonstrate that when auditors cause a high deadline pressure situation they sample fewer items, are less likely to assess identified errors as material, and are more willing to accept higher deviation rates to prevent the negative outcome of missing a deadline. We extend the theory of anticipatory regret to the ACM negotiation context. We expect that auditors will perceive a higher level of responsibility, or fault, in the accumulated audit difference condition because of the auditor’s causal role in allowing the difference to accumulate. Consequently, anticipatory regret suggests that, when auditors consider the impact of an accumulated audit difference, they will seek to lessen harmful consequences by proposing smaller audit adjustments, and be more likely to exhibit concessionary behavior.

**Client-Management and Attribution Theory**

Similar to the auditor, client management will likely view their leverage differently when a misstatement occurred predominantly in the current year relative to a misstatement that accumulated over a number of years. Specifically, clients may have developed an expectation that the auditor will not require an adjustment for a particular audit difference that has built up over several years. It is important to note that social norms are particularly important in these types of discussions (e.g., Pruitt 1981). Expectancy Violation Theory suggests individuals develop expectations through observance and interactions (Burgoon 1978) and that violation of such expectancies results in less favorable outcomes. In an adjustment discussion setting, we
posit that the expectancy violation will cause the client to direct their focus to the violation (Le Poire and Burgoon 1996). Further, the client may have a strategic advantage in these discussions due to the potential to “blame” auditors for allowing these accumulations to develop into a larger audit difference (e.g., Pruitt and Carnevale 1993). Stuart (2004) finds that negotiation parties who identify the opposing party as the cause of a negatively viewed negotiation issue will adopt a more contentious negotiation style. Consequently, financial officer participants in the accumulated audit difference treatment will likely tend toward a more contentious negotiation style, creating downward pressure on the accepted adjustment. This discussion suggests that issues of fault and blame alter the negotiation leverage of both the auditor and client management resulting in the following hypothesis:

**H1:** Auditor-Client dyads will negotiate smaller final adjustments when an identified misstatement has accumulated over time relative to when the misstatement occurred primarily in a single year.

### Directional Impact on Income

There is a long history of audit and accounting research that considers the impact of the directional nature of audit differences on audit decisions and financial reporting (e.g., Kinney and Martin 1994; Elder and Allen 1998; Nelson et al. 2002; Nelson et al. 2005). Within this literature, Braun (2001) and Wright and Wright (1997) both find that auditors waive significantly more proposed audit adjustments when correcting the audit difference would have a positive impact on income. Explanations offered for the existence of such conservatism include contract, litigation, income tax, regulatory and political concerns (Watts 2003; Qiang 2007; Habib 2007; Garcia Lara and Mora 2004). However, subsequent to these studies, the International Accounting Standards Board (IASB) as well as the Financial Accounting Standards Board (FASB) argue that conservatism should no longer be part of the conceptual framework for financial reporting.
suggesting that deliberate understatement violates the concept of neutrality (e.g., IASB 2018, pp48-49). Accordingly, accounting standards propose that misstatements should be corrected regardless of the directional impact of the potential audit adjustment (FASB 2010). Despite this regulatory “scrubbing” of conservatism, the deliberate excusing of income or asset understating misstatements appears to persist (e.g., Hope et al. 2013).

Canace et al. (2016) consider a sample of firms with large overstatements in their allowances for uncollectible accounts. Their sample includes firms with an average uncollectible account balance sufficient to cover over five years of leading write-offs. They find that, though SAB 108 requires firms to resolve material misstatements in accumulated reserves, none of the firms adjusted their overly conservative allowances in response to the specific regulatory call to do so. Interviews with financial officers, auditors, and regulators suggest remnants of conservatism still persist in this judgment. Financial officers stated that they prefer conservatism, linking this directly to the idea that if they are over-reserved then they do not have to worry about taking an earnings hit in future periods (i.e., earnings management potential). They further suggest that they know their auditors will not be concerned with these conservative balances. Interestingly, interviewed auditors agreed with this latter comment stating that an overstated allowance is a low-risk area and that they have “bigger fish” to consider. Finally, that study included interviews with regulators (SEC and PCAOB) who suggested they tend to focus on auditors’ processes, but that if they did scrutinize an estimate, they would be more concerned with overstatements of assets.

Again, extant literature suggests that understated net assets provide management the ability to manage earnings (DeFond 2002; Penman 2001) and empirical evidence supports this view (Barton and Simko 2002; McNichols and Wilson 1988). Levitt (1998) alleges that firms
create “cookie jar” reserves to purposely understate assets in the current period with plans to reverse the reserve later to inflate earnings. Jackson and Liu (2010) find that firms with inflated allowance for doubtful accounts reserves are more likely to manage earnings in future periods to meet or beat analysts’ forecasts. Thus, while auditors understand the risks associated with overstated reserves (i.e., future earnings management opportunities) and what the normative response should be, vestiges of conservatism likely hamper their ability to dissuade this behavior by their clients (i.e., via an income increasing adjustment). Consequently, we predict that this “conservatism” argument by the client will negatively affect the size of a negotiated adjustment when the underlying misstatement would result in an increase to income.

**H2:** Auditor-Client dyads will negotiate smaller final adjustments when the adjustment to correct an identified misstatement is income increasing relative to income decreasing.

**Negotiation Process**

We examine two important areas of potential variation in how auditors and their clients will resolve misstatements identified by the auditor in the unaudited financial statements. As discussed above, the timing of the accumulation of a misstatement as well as the direction of the misstatement provide differing pressures, incentives and preferences on the auditor and client management altering their relative leverage for the ensuing negotiation. In addition to the contribution of increasing our understanding of the resolution of these misstatement characteristics, our interactive data collection technique allows us to consider the negotiation process. Our unique experimental method provides a significant amount of text from communications, post-negotiation explanations, and intermediary positions to help us better understand each party’s negotiation process (e.g., persuasive methods and strategies) and how this may contribute to the outcome of the negotiation. Comparing these process data and negotiated outcomes to pre-negotiation judgments historically used to proxy for negotiation
outcomes (e.g., initial offer and expected outcome) allow us to examine whether the negotiation process influences empirical inferences leading to the following research question:

**RQ:** How do the interactions between auditors and their clients alter pre-planned negotiated outcomes? What evidence of the persuasion techniques engaged in by the counterparts is provided in these conversations?

### III. METHOD

**Participants**

Our experimental design matches auditors and financial officers in dyads (one auditor, plus one financial officer) for the purposes of interactively negotiating an audit adjustment. Thirty-six dyads completed the study. Auditors include Partners (n=18), Senior Managers (n=10), and Managers (n=8) from accounting firms in the U.S. (n=26) and Australia (n=10). Financial Officers include C-Suite (n=17), Controllers (n=6), and Other Corporate Executives (n=13) in the U.S. (n=26) and Australia (n=10). On average, auditors (financial officers) had 17 (17) years of task-relevant experience. Table 1 provides additional demographic information.

Our recruitment efforts involved communicating with personal contacts and alumni of our respective universities. To aide recruitment efforts, once an individual agreed to participate, we asked if they would provide contact information for their real-world counterpart. This method resulted in 12 dyads where participants knew one another and 24 dyads where they did not. Dyads with prior relationship are randomly assigned across conditions and have neither a main effect nor do they interact with either manipulation. All dyads were randomly assigned to

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2 There were no significant differences found based on country of participant, audit firm affiliation, or Big-Four versus non-Big-Four audit firm on any dependent variable (all p > 0.10).

3 For auditor participants, we asked them to provide contact information for a corporate executive for one of their audit clients. They were instructed that the person should be someone with whom they would discuss potential significant audit matters (e.g., management representations, audit adjustments, timing of the audit engagement). For financial officers, we asked them to provide contact information for the partner or manager of their external auditor.
the experimental conditions. After assignment, participants were sent an email containing an invitation to participate and a link to the secure negotiation website.

**Study Website and Procedures**

To facilitate interaction, auditors and financial officers negotiated via a proprietary website, developed by the researchers. Importantly, to meet the time and schedule demands of the experienced business professionals recruited for this study, the design of the website allowed participants to complete the case as their schedules permitted and did not require participants to be online at the same time as their counterpart. After being assigned to the experimental conditions, participants were sent an automated email from the study website. The invitation email included the informed consent form and a link to the study website. The participant was instructed to click the link if they understood the informed consent and agreed to participate. After clicking the link, the participant was directed to the study website.

Auditors (financial officers) were informed they would assume the role of audit partner assigned to an audit engagement (CFO) for a hypothetical audit client. Participants were given background and key financial information and were told the audit team identified an audit difference related to the allowance for doubtful accounts, which required a discussion between the financial officer and auditor. The background information included the experimental manipulations. At this point, financial officers were told the auditor was considering the issue and they would be contacted when new information was available for their review.

Auditors were then provided a form for proposing an audit adjustment. Along with a quantitative proposed adjustment amount field, auditors were provided an open text-field where they were required to provide qualitative information that they would like to accompany their

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4 Participants were made aware of this fact. To ensure each participate understood the function of the study website and how to navigate the case and materials, a brief set of instructions was provided on the study website.
proposed audit adjustment. The use of qualitative text is meant to better approximate real-world negotiations, where auditors and their clients can choose to use any arguments or strategy that they feel is necessary in order to obtain their preferred adjustment amount. Finally, the auditor also provided estimates of their required minimum adjustment amount and expected outcome. They were told that only the proposed adjustment amount and qualitative text would be shared with their counterpart. After completing all of the proposal entry fields, auditors were told that their proposal was being reviewed by the financial officer and they would be contacted once the financial officer accepted or countered their proposal.

An automated email was then sent from the website to the financial officer, notifying them that the auditor provided new information and a link was provided that brought them back to the website. Rather than having to proceed through all of the background information screens again, participants were directed to a summary screen detailing negotiators’ previously proposed adjustments and related qualitative text. Tabs were available at the top of the screen that, once clicked, expanded to provide the previously reviewed background and financial information (see Figure 1). The financial officer could then accept or counter the auditor’s proposal. Financial officers also were required to provide a textual response to accompany their proposed audit adjustment. They also provided estimates of their maximum acceptable adjustment amount and expected outcome. If a counter-proposal was made, an automated email was sent to the auditor, in the same fashion as previously sent to the financial officer. Discussions continued in this manner until a resolution or impasse was reached. Once a party agreed to a proposed adjustment amount, both participants were provided a link to the post-experiment questionnaire.

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5 In subsequent rounds, auditors were also provided an option to accept their financial officer’s proposal.
6 Participants also were provided with email contact information to direct any questions or issues, technology related or otherwise, encountered during the study.
Experimental Manipulations

To test our hypotheses, we varied the income direction (increasing or decreasing) and accumulating nature (accumulating or non-accumulating) of the audit difference according to the following three conditions: non-accumulating/income decreasing, accumulating/income decreasing, accumulating/income increasing. We modeled our accumulating audit difference conditions after a specific example of an incorrect application of accounting standards outlined in Section N of SAB 108 (SEC 2006). Dyads in the accumulating/income increasing (decreasing) condition were presented with a table that quantitatively indicated an overstatement (understatement) of the allowance for doubtful accounts had consistently grown over the previous four years. Dyads in the non-accumulating/income-decreasing condition were presented with a table indicating the difference remained near zero for the previous four years. In all conditions, auditors were told that the current year audit difference was $5,200,000 and engagement materiality was $5,000,000. Financial officers were not provided with the current year audit difference or materiality. Figure 2 depicts the tables provided to dyads in each condition, which operationalized the manipulations.

Dependent Variables

Dyads’ negotiated outcome serves as our primary dependent variable. We also capture participants’ proposed adjustment amount (all participants), required minimum adjustment amount (auditors), maximum allowed adjustment amount (financial officers), and expected

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7 We did not test a non-accumulating/income increasing condition. Such a condition would not represent a cookie jar reserve (i.e., as is the case in the accumulating/income increasing condition) and would not decrease earnings, and thus, should be relatively non-contentious. Given data collection demands, and that we consider a non-accumulating income increasing audit difference to be less theoretically compelling, we did not operationalize this condition.

8 Consistent with AU Section 380, participants were told that the past differences were outlined in the auditor’s Communication to Those Charged with Governance letters, provided to the client in previous years. Additionally, auditors were told that the financial officer did not yet know about the current year audit difference.

9 Participants were told no adjustments were made in the previous four years related to the allowance account.
outcome (all participants) during each round of the negotiation. These four variables represent
dependent variables used in traditional ACM negotiation research, although they would
traditionally be measured once, given prior research has not examined dyadic ACM negotiations.

We also answer the call of previous research by observing and capturing data from the
negotiation process (Kachelmeier 2018; Salterio 2012). Data includes participants’ qualitative
text that accompanied participants’ proposed adjustments. Additionally, we capture whether and
to what extent adjustment amounts are malleable over the course of a negotiation, how long (i.e.,
number of rounds) dyads take to reach an agreement or impasse, and which party agrees to the
final proposal.10

Post-experiment Questionnaire

After reaching an agreement, participants were directed to a post-experiment
questionnaire. The first question asked participants whether they knew their counterpart. If the
participant answered “yes”, then they were asked if they had discussed an audit adjustment with
their counterpart before, and, if so, were asked to rate how well such discussions had gone. Next,
all participants answered questions intended to capture process variables, perceptions of the case
and the parties in the case. Finally, participants completed demographic information.

IV. RESULTS

Tests of Hypotheses

Hypothesis 1 predicts dyads will negotiate a smaller adjustment when an audit difference
accumulated over time rather than developed primarily in one year. Table 2 shows, consistent
with H1, dyads in the accumulating/income decreasing condition negotiated significantly smaller
adjustments than dyads in the non-accumulating/income decreasing condition (p-value = 0.001,

10 Five dyads did not reach an agreement and are not included in our sample, given that no agreed-upon adjustment
(primary dependent variable) was determined. Impasse dyads are not concentrated in any one experimental cell.
one-tailed, Panel B). Specifically, dyads negotiated a $1,783,333 adjustment when considering an *accumulating/income decreasing* difference, and negotiated a $3,650,000 adjustment when considering a *non-accumulating/income decreasing* difference (Table 2, Panel A).

Hypothesis 2 predicts dyads will negotiate a smaller adjustment when an adjustment resulting from an accumulated audit difference increases, rather than decreases, income. Consistent with H2, dyads in the *accumulating/income increasing* condition negotiated significantly smaller adjustments than dyads in the *accumulating/income decreasing* condition (p-value = 0.013, one-tailed, Table 2, Panel B). Specifically, dyads negotiated a $1,138,462 adjustment when considering an *accumulating/income increasing* difference, and negotiated a $1,783,333 adjustment when considering an *accumulating/income decreasing* difference.\(^{11}\)

**Mediation Analyses**

Figures 3 and 4 present our conceptual models of mediation. We explore mediation of H1 and H2 using the procedures outlined in Baron and Kenny (1986).\(^{12}\) Specifically, we follow the four-step regression analysis which involves estimating the following in order to test for mediation of H1 and H2, respectively:

<table>
<thead>
<tr>
<th>Four-Step Approach, H1</th>
<th>Four-Step Approach, H2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) OUTCOME = $a_0 + a_1$ACCUM + $\varepsilon$;</td>
<td>(1) OUTCOME = $a_0 + a_1$DIRECT + $\varepsilon$;</td>
</tr>
<tr>
<td>(2) BLAME = $\beta_0 + \beta_1$ACCUM + $\varepsilon$;</td>
<td>(2) IMPORT = $\beta_0 + \beta_1$DIRECT + $\varepsilon$;</td>
</tr>
<tr>
<td>(3) OUTCOME = $\lambda_0 + \lambda_1$BLAME + $\varepsilon$;</td>
<td>(3) OUTCOME = $\lambda_0 + \lambda_1$IMPORT + $\varepsilon$;</td>
</tr>
<tr>
<td>(4) OUTCOME = $\delta_0 + \delta_1$ACCUM + $\delta_2$BLAME + $\varepsilon$</td>
<td>(4) OUTCOME = $\delta_0 + \delta_1$DIRECT + $\delta_2$IMPORT + $\varepsilon$</td>
</tr>
</tbody>
</table>

\(^{11}\) Results for H1 and H2 are robust to the inclusion of Domicile (USA or Australia) and Past Relationship (Yes, No) as covariates.

\(^{12}\) Due to data limitations (i.e., n<13 in each experimental condition) we did not utilize Hayes’ PROCESS approach to test for mediation effects (Hayes 2017).
where: OUTCOME is dyads’ negotiated adjustment amount; ACCUM is the accumulating nature of the audit difference, which is coded as 0 for participants in the non-accumulating condition and 1 for participants in the accumulating condition; DIRECT is the income direction of the audit difference, which is coded as 0 for participants in the income decreasing condition and 1 for participants in the income increasing condition; BLAME is participants’ perceived level of blame to the audit firm for allowing the misstatement to accumulate (scale from 1 to 11); IMPORT is participants’ perception of how important this manner (i.e., income direction) of an adjustment would be to their audit firm if it were to occur in the real-world (scale from 1 to 11).

**Hypothesis 1 Mediation Analysis**

Our development of hypothesis 1 is predicated on two complimentary psychological phenomena. First, we posit auditors will experience anticipatory regret when a misstatement has accumulated over time, due to the auditor firm’s waiving of prior immaterial audit differences. Second, when a misstatement has accumulated, we suggest that financial officers will develop an expectation that an audit adjustment will not be proposed in the current period because they attribute fault to the audit firm for consistently waiving audit differences in the past. Tables 3 and 4 provide mediation results for these complimentary mechanisms, respectively.

Both auditors and financial officers attributed a higher level of blame to the audit firm when the misstatement was accumulating (8.82 and 6.82, respectively, untabulated) versus non-accumulating (4.42 and 3.92, respectively, untabulated) and these differences were significant (p-values <0.001 and = 0.009, Tables 3 and 4 respectively). Therefore, in both cases, step 2 of Baron and Kenny (1986) is satisfied. The significant results for H1 also satisfy Step 1. Further, the path coefficient between auditors’ perception of blame and negotiated outcomes is positive.
and significant, satisfying step 3.\textsuperscript{13} Finally, the effect of the accumulating manipulation is insignificant when auditors’ perceived blame also is included in the model (p-value = 0.102, Table 3), passing step 4 and suggesting partial mediation.\textsuperscript{14} Thus, consistent with anticipatory regret, when a misstatement accumulated over multiple periods rather than occurring primarily in one period, auditors perceived more blame, leading to significantly smaller adjustments.

However, results do not support financial officers’ attribution of blame as a mediator. Specifically, the path coefficient of financial officers’ attribution of blame to negotiated outcome is not significant (p-value = 0.187, Table 4), thus failing step 3 of the mediation requirements of Baron and Kenny (1986). It is important to note that, consistent with practice, auditors were the first movers in our experiment, in that they were first to propose an adjustment. Consequently, while financial officers did attribute significantly more blame to the audit firm in the accumulating condition, only auditors’ perception of audit firm blame was able to independently affect adjustment amount (i.e., client participants’ adjustment decisions were a function auditors’ initial proposal). In other words, the effect of financial officers’ attribution of blame may be limited because of auditors’ preemptive adjustment judgments due to anticipatory regret.

**Hypothesis 2 Mediation Analyses**

To explore whether partiality for conservatism differentially impacts adjustment decisions of income increasing versus decreasing audit differences, we test for mediation using participants’ perception of the importance of the directional nature of the adjustment. Specifically, auditors (financial officers) responded to the following:

\textsuperscript{13} The process variable BLAME was captured on a scale from 1 to 11 where lower scores indicated more attributed blame to the audit firm. Thus, the positive coefficient indicates that, as auditors’ responses increased (i.e., perceived less blame), negotiated adjustments were significantly larger.

\textsuperscript{14} We refer to this as partial, rather than full, mediation as the effect of auditor blame also is insignificant in this model (p-value = 0.160, Table 3).
Consider whether the adjustment in this case increased or reduced the bottom line income of Wareham, Inc. Assuming the audit difference identified in this case occurred for one of your clients (your company), rate the following statement:

*Having the client adjust income to reflect this audit difference would be a priority on this engagement (Adjusting income to reflect this audit difference would be a priority for our auditor).*

Tables 5 and 6 provide mediation analyses using auditors’ and financial officers’ perceptions of importance, respectively. While auditors’ and financial officers consistently perceived higher importance with respect to income decreasing, rather than increasing, adjustments (p-values = 0.004 and <0.001, Tables 5 and 6 respectively), auditors’ perception of importance does not mediate H2. Specifically, neither step 3 nor step 4 of the Baron and Kenny (1986) approach to testing for mediation are supported (see Table 5). However, regression results presented in Table 6 indicates that financial officers’ perceptions of importance of the directional nature of an adjustment partially mediates H2. Thus, consistent with our prediction, negotiated outcomes are affected by the income direction of misstatements due in part to vestiges of conservatism, specifically financial officers’, even though the notion of conservatism has been removed from accounting standards in favor of neutrality (e.g., IASB 2018, FASB 2010).

**Additional Analyses**

After each adjustment proposal, we asked participants to provide an estimate of their minimum required adjustment amount (maximum allowed, for financial officers) and their estimate of the expected adjustment amount. These measures, along with participants’ opening proposal, represent the most commonly used measures of negotiation judgments in the literature (e.g., Hatfield et al. 2010, Brown-Liburd and Wright 2011, Bennett et al. 2015). By comparing
dyads’ negotiated outcomes to these traditional measures of negotiation judgments, we are able to provide evidence as to whether the negotiation process plays a significant role in inferences drawn from our research. Given our design, only the auditor was capable of providing a truly independent initial proposal amount (i.e., financial officers’ initial proposal was contingent on the auditor’s initial proposal). Thus, the strictest test of whether or not our process driven negotiated outcomes differ from traditional one-way pre-negotiation measures is to compare our adjustment amounts to auditors’ pre-negotiation judgments. Table 7 provides descriptive statistics and ANOVA results for all conditions.

Results for hypothesis 1, using traditional pre-negotiation judgments, are consistent with results using dyads’ negotiated outcomes. That is, auditors’ initial proposal, minimum required adjustment, and expected adjustment outcome are all significantly smaller when considering an accumulating, rather than non-accumulating adjustment ($5,109,091 vs. $3,825,000 [p-value = 0.023], $3,445,455 vs. $1,666,667 [p-value = 0.010], $4,290,910 vs. $1,895,000 [p-value < 0.1], respectively; Table 7). However, results for hypothesis 2, using pre-negotiation judgments do not suggest any significant difference. Specifically, neither auditors’ initial proposals, minimum required adjustments, nor expected adjustment outcome differed significantly between income direction conditions ($3,486,538 vs. $3,825,000 [p-value = 0.656], $1,466,923 vs. $1,666,667 [p-value = 0.773], $1,895,000 vs. $2,140,000 [p-value = 0.689], increasing versus decreasing, respectively; Table 7). These results run counter to results using dyads’ negotiated adjustments, which indicate that dyads’ negotiated adjustments are significantly smaller when considering an income-increasing rather than income-decreasing adjustment (p-value = 0.013, Table 2). Stated another way, if this study was designed using
traditional methods (i.e., providing the case materials to auditor participants and eliciting their judgments), we would have found “no results” for hypothesis 2.

We believe this to be compelling evidence of the importance of considering the interactive process of negotiations when designing future ACM negotiation studies. Given the social nature of ACM negotiations, observing only one side of the negotiation limits what we learn from negotiation research by possibly understating, or overstating, findings. Our results echo the sentiment in Salterio (2012), that the study of "dynamic interaction is certainly a fruitful area for more investigation (page 270).”

**Qualitative Findings from Negotiations**

As discussed above, the negotiation process captured by our web-based experimental instrument included text provided by each participant in each round where they proposed a new amount. That is, each participant had an opportunity to persuade their counterpart into accepting their position. The result is a significant amount of data revealing how participants negotiated, including reactions to their counterparts’ arguments. In this section we report this qualitative information to address our research question that the interactive process may reveal strategies and change outcomes.

The development of hypothesis 1 predicts that auditors will have a harder time convincing the client to make large adjustments when the misstatement accumulated over time. Consistent with this idea, 50% of auditors in the accumulating conditions preemptively cite prior waiving of nonmaterial adjustments in their argument to require an adjustment in the current period, while only 11% did so in the non-accumulating condition. Generally, auditors tried to explain how waiving these adjustments in the past was done to help the client, but that that the amount had become a material misstatement in the financials.
dyad 125-auditor “I know that we haven’t made an adjustment to the allowance in the past, but the gap between your estimate and the results of our testing keeps getting wider and has gotten to the point that we can no longer pass on it.”

dyad 151-auditor “Notwithstanding that the basis for the preparation of the bad debts provision has not changed over the past five years, the quantum of the uncorrected difference has continued to increase and is now at a level that is material to the accounts”

In response to a post-experiment question asking auditors to explain why they accepted an adjustment different than their opening proposal, the auditor in dyad 122 stated, “He (the financial officer) had a good point related to the fact that the (audit) firm had been signing off on these numbers in the past, and given that, then how in the current year could it be a problem. I feel like he had a great point with that statement.” Likewise, financial officers often used this past behavior in their persuasion attempts.

dyad 144-financial officer “…in past years there have been differences in our estimate and yours, however these differences have always been waived. I don’t see why we would go from $0 adjustment to a $5.2 million adjustment.”

dyad 122-financial officer “we have consistently used this method in the past and have had differences in our estimate versus the audit team, however there have been no adjustments in the past.”

dyad 130-financial officer “Using the same methodology for the last five years and not having any material write-offs during that time gives the team a great deal of comfort that any adjustment is not needed. I also find it surprising that an adjustment of the size you propose is warranted due to the fact the 3.8 million adjustment proposed last year was waived.”

Interestingly, consistent with the idea that auditors have greater leverage in the non-accumulating condition, they were more likely to press their position, highlighting audit quality and financial statement accuracy, and on occasion, resorting to threats.
dyad 100-auditor “While I understand that this is a large adjustment, we believe it is important to accurately present the results of operations for the purpose of maintaining strong financial reporting quality and benefitting shareholders’ decisions.”

dyad 133-auditor “I’m sure that you’ll agree that ‘getting it right’ is the most important thing.”

dyad 123-auditor “Please bear in mind that if this variance cannot be resolved we may be required to issue a qualified audit opinion.”

The development of hypothesis 2 suggests that financial officers may cite conservatism in the income increasing condition, to persuade against the need for adjustment.

dyad 122-financial officer “I understand that an adjustment is necessary, but $2,500,000 seems much too large, especially since our estimate is conservative in nature.”

dyad 121-auditor “You may believe your estimate is conservative, but …”

dyad 119-financial officer “we are conservative in our estimate to account for any unforeseen collection issues that could arise from our customers.”

Interestingly, in this last dyad (119) it appears that the client’s argument had some impact, as the auditor, in a post negotiation statement regarding why they conceded, stated “The client's estimate was conservative and doesn't represent much audit risk.”

Another interesting finding in this study is the willingness of auditors to concede in negotiations compared to findings in prior ACM negotiation research. For example, Hatfield et al. 2010 found that 76% of auditors stuck to their initial position (i.e., didn’t concede). However, in our sample only 19% of auditors made no concessions. In a post negotiation statement, the auditor in dyad 133 stated, “A small concession doesn't bother me, especially with an estimate account where we can never be 100% sure of our estimate.” Thus, it appears that, when negotiating an amount with a real financial officer, the auditor is less able to “stick to their guns”
further demonstrating the contribution of our interactive experimental method. Beyond this, it
appears that auditors were quite likely to use concessions as a persuasive strategy.

dyad 132-auditor “We understand that a $5,200,000 adjustment is a big change to your
bottom line and that you may not have expected this given that we have waived
differences in this account in the past. Accordingly, I have lowered the adjustment by
$1,700,000…”

dyad 125-auditor “We recognize that the allowance account is highly subjective, so
although our audit team appropriately performed procedures which indicated a difference
in estimate in the amount of $5,200,000, we are only proposing an adjustment in the
amount of $1,500,000 to allow for such subjectivity.” (note, auditor started this
negotiation at $2,600,000).

dyad 107-auditor “I have knocked off $200,000 of this increase…”

V. DISCUSSION

This study provides two primary contributions to the literature. First, we contribute to the
ACM negotiation literature by demonstrating how the negotiation process can have an impact on
the efficacy of regulatory guideline intent. We demonstrate that, even though accumulated
misstatements should be treated the same as a single period misstatement, aspects of the
negotiation process reduce the negotiated adjustments required. Similarly, we find that
conservatism influences the negotiation process even though fundamental guidelines call for
neutrality over conservatism. Negotiation-based theory suggests that aspects of expectations,
blame, responsibility and issue importance will alter the negotiators positions and their
negotiated outcome. We provide mediation results and textual analysis that are consistent with
these causes. Overall, these findings suggest that when considering whether regulatory guidance
can improve the audit process and/or financial statement quality, it is important to understand
how behavioral influences, via social interactions, might moderate regulatory intent.
Secondly, we demonstrate an important new approach to study auditor/client interactions. Our web based interactive experimental instrument uses technology to bring together two highly difficult to obtain participant groups, allowing them to interact and produce joint outcomes. This addresses Kachelmeier’s (2018) call for research on auditor/client interactions where participants interact and has two key impacts on social psychology based research in accounting. By augmenting experimental realism, we improve construct validity by better matching theory to our constructs as well as improving internal validity by strengthening our manipulations (Morales et al. 2017). Further, as Kachelmeier (2018) and Salterio (2012) point out, interactions such as negotiations are a function of each party reacting to the other party, such that negotiated outcomes are a complicated result of the strategies and persuasiveness of both sides, and how each side reacts to the other. The value of this method is born out in that outcomes appear different than prior, non-interactive research would suggest. First, it appears that the introduction of a real social context causes auditors to be willing to move off their initial opinion more than prior research suggests. Further, while auditors do not treat income direction differently with regard to pre-negotiation measures (used in prior research), their financial officer counterparts were able to persuade them off this position. Thus, in a social context like auditor-client negotiation, actually interacting with another person mattered.
REFERENCES


Le Poire, B. A., and J. D. Burgoon 1996. Usefulness of Differentiating Arousal Responses within Communication Theories: Orienting Response or Defensive


FIGURE 1 – Example Negotiation Screen Seen by Participant

You are signed in as the client for this case.

<table>
<thead>
<tr>
<th>Proposals</th>
<th>Past Differences</th>
<th>Background Information</th>
<th>Troubleshooting</th>
</tr>
</thead>
</table>

After considering the most recent proposed adjustment amount, please choose from the following:

<table>
<thead>
<tr>
<th>Who</th>
<th>Adjustment</th>
<th>Balance</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditor</td>
<td>$2,000,000</td>
<td>$43,300,000</td>
<td>I understand no significant write-offs but why the deterioration in the agings and slow down in customer collections? Our team analyzed historical collection rates, collections after year-end, specific customer analysis, write-off history, and industry trends.</td>
</tr>
<tr>
<td>Client</td>
<td>$0</td>
<td>$41,300,000</td>
<td>Audit partner; I might be willing to consider a modest increase in the reserve but my team feels any increase is unwarranted. Using the same methodology for the last five years and not having any material write-offs during that time gives the team a great deal of comfort that any adjustment is not needed. I also find it surprising that an adjustment of the size you propose is warranted due to the fact the $3.8M adjustment proposed last year was waived. Somehow your team must have gotten comfortable with our approach. Hopefully they can revisit their work and get comfortable with ours again this year. If you still feel an adjustment is necessary this year, please provide some additional detail as to how your team developed their estimate. Thanks.</td>
</tr>
<tr>
<td>Auditor</td>
<td>$5,200,000</td>
<td>$46,500,000</td>
<td>CFO, similar to prior years, our audit team has estimated a difference in the allowance for bad debts. As you may recall, we have consistently had differences but in the past the differences were never material. This year the difference amount is quite a bit more and is material. I wanted to bring this to your attention so we can better understand your perspective.</td>
</tr>
</tbody>
</table>

$41,300,000 Unadjusted balance

Figure 1 provides an example screenshot from a client’s perspective. In this example, the client is considering whether to accept the auditor’s second round proposal or to counter the auditor’s proposal. Tabs are provided at the top of the screen that, once clicked, expand to provide all case information. Negotiation history (proposed adjustment amount, proposed ending balance, and qualitative text) is chronicled in the chart, in chronological order, starting with the unadjusted balance. For reference, the above screenshot represents the Accumulating Income Decreasing condition.
FIGURE 2 - Manipulations

<table>
<thead>
<tr>
<th>Year</th>
<th>Audit Team’s Estimate of ADA</th>
<th>Client’s ADA Balance</th>
<th>Over (Under) Accrued</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Accumulating/Income Decreasing Condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$34,900,000</td>
<td>$35,100,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>2013</td>
<td>$36,900,000</td>
<td>$36,200,000</td>
<td>$(700,000)</td>
</tr>
<tr>
<td>2014</td>
<td>$37,700,000</td>
<td>$37,900,000</td>
<td>$200,000</td>
</tr>
<tr>
<td>2015</td>
<td>$40,100,000</td>
<td>$39,200,000</td>
<td>$(900,000)</td>
</tr>
<tr>
<td>2016 (auditor only)</td>
<td>$46,500,000</td>
<td>$41,300,000</td>
<td>$(5,200,000)</td>
</tr>
<tr>
<td></td>
<td>Accumulating/Income Decreasing Condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$36,100,000</td>
<td>$35,100,000</td>
<td>$(1,000,000)</td>
</tr>
<tr>
<td>2013</td>
<td>$38,400,000</td>
<td>$36,200,000</td>
<td>$(2,200,000)</td>
</tr>
<tr>
<td>2014</td>
<td>$41,200,000</td>
<td>$37,900,000</td>
<td>$(3,300,000)</td>
</tr>
<tr>
<td>2015</td>
<td>$43,000,000</td>
<td>$39,200,000</td>
<td>$(3,800,000)</td>
</tr>
<tr>
<td>2016 (auditor only)</td>
<td>$46,500,000</td>
<td>$41,300,000</td>
<td>$(5,200,000)</td>
</tr>
<tr>
<td></td>
<td>Accumulating/Income Increasing Condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>$34,100,000</td>
<td>$35,100,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>2013</td>
<td>$34,000,000</td>
<td>$36,200,000</td>
<td>$2,200,000</td>
</tr>
<tr>
<td>2014</td>
<td>$34,600,000</td>
<td>$37,900,000</td>
<td>$3,300,000</td>
</tr>
<tr>
<td>2015</td>
<td>$35,400,000</td>
<td>$39,200,000</td>
<td>$3,800,000</td>
</tr>
<tr>
<td>2016 (auditor only)</td>
<td>$36,100,000</td>
<td>$41,300,000</td>
<td>$5,200,000</td>
</tr>
</tbody>
</table>

Figure 2 details the manipulation provided to participants in each of the three experimental conditions. The 2016 audit team estimate and over(under)-accrued amount was shown only to auditor participants.
FIGURE 3 – Conceptual Models of Mediation, Hypothesis 1

Panel A: Conceptual Model using auditors’ perception

Panel A: Conceptual Model using financial officers’ perception
FIGURE 4 – Conceptual Models of Mediation, Hypothesis 2

Panel A: Conceptual Model using auditors’ perception

Panel B: Conceptual Model using financial officers’ perception
<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
</thead>
</table>

**Demographic Information**

<table>
<thead>
<tr>
<th></th>
<th>Non-Accumulating Income Decreasing</th>
<th>Accumulating Income Decreasing</th>
<th>Accumulating Income Increasing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDITOR Participants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domicile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>9</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Australia</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Firm Size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big-Four</td>
<td>5 (46%)</td>
<td>6 (50%)</td>
<td>5 (39%)</td>
</tr>
<tr>
<td>International</td>
<td>2 (18%)</td>
<td>2 (17%)</td>
<td>5 (39%)</td>
</tr>
<tr>
<td>Regional</td>
<td>4 (36%)</td>
<td>4 (33%)</td>
<td>3 (22%)</td>
</tr>
<tr>
<td>Audit Firm Role</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner, or equivalent</td>
<td>5 (46%)</td>
<td>6 (50%)</td>
<td>7 (54%)</td>
</tr>
<tr>
<td>Senior Manager</td>
<td>4 (36%)</td>
<td>3 (25%)</td>
<td>3 (23%)</td>
</tr>
<tr>
<td>Manager</td>
<td>2 (18%)</td>
<td>3 (25%)</td>
<td>3 (23%)</td>
</tr>
<tr>
<td>Experience (years) mean</td>
<td>15.55</td>
<td>17.83</td>
<td>18.38</td>
</tr>
<tr>
<td>Age (years) mean</td>
<td>41.57</td>
<td>43.00</td>
<td>42.58</td>
</tr>
<tr>
<td>Gender – Male/Female</td>
<td>8 / 3</td>
<td>7 / 4</td>
<td>10 / 3</td>
</tr>
</tbody>
</table>

| **CLIENT Participants** |                                   |                                |                                |
| Domicile              |                                   |                                |                                |
| USA                   | 9                                 | 9                              | 8                              |
| Australia             | 2                                 | 3                              | 5                              |
| Public/Non-Public Co. | 4 / 7                             | 5 / 7                          | 5 / 8                          |
| Corporate Role        |                                   |                                |                                |
| C Suite^              | 4 (36%)                           | 6 (50%)                        | 7 (54%)                        |
| Controller            | 4 (36%)                           | 1 (8%)                         | 1 (8%)                         |
| Other*                | 3 (28%)                           | 5 (42%)                        | 5 (38%)                        |
| Experience (years) mean | 16.50                          | 14.70                          | 19.42                          |
| Age (years) mean      | 42.67                             | 38.00                          | 41.40                          |
| Gender – Male/Female  | 7 / 3                             | 8 / 2                          | 7 / 5                          |

Note – we did not require participants to provide age or gender, and not all participants did.

^ - Includes CFO, CAO, and Director of Finance

* - When a client participant selected “Other”, they were asked to provide a description of their job title.

Responses included titles such as Accounting Policy Manager, Financial Reporting Manager, Senior Accounting Manager, etc.
TABLE 2

Panel A: Mean (Std. Dev.) [n]

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(1) Non-Accumulating Income Decreasing</th>
<th>(2) Accumulating Income Decreasing</th>
<th>(3) Accumulating Income Increasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiated adjustment</td>
<td>$3,650,000 ($1,299,808)</td>
<td>$1,783,333 ($854,755)</td>
<td>$1,138,462 ($457,873)</td>
</tr>
<tr>
<td>n=11</td>
<td>n=12</td>
<td>n=13</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: Hypothesis Tests

H1: NA-ID vs A-ID (1 vs 2) p-value = 0.001 t-stat = 4.104
H2: A-ID vs A-II (2 vs 3) p-value = 0.013 t-stat = 2.378

Consistent with the hypotheses, we test whether (1) < (2) and whether (2) < (3). Accordingly, all p-values are one-tailed.
### Table 3

**H1 Regression Analyses for Auditors’ Perceived Blame to the Audit Firm as Mediator**

<table>
<thead>
<tr>
<th>Equation</th>
<th>Dependent Variable</th>
<th>ACCUM</th>
<th>BLAME</th>
<th>Model F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation (1)</td>
<td>OUTCOME</td>
<td>-1,866,667</td>
<td>16.844</td>
<td>.445</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-4.104)</td>
<td>[0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (2)</td>
<td>BLAME</td>
<td>-4.402</td>
<td>26.367</td>
<td>.557</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-5.135)</td>
<td>[&lt;0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (3)</td>
<td>OUTCOME</td>
<td>309,088</td>
<td>15.504</td>
<td>.425</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.937)</td>
<td>[0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (4)</td>
<td>OUTCOME</td>
<td>-1,141,804</td>
<td>164,685</td>
<td>9.942</td>
<td>.499</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-1.716)</td>
<td>(1.460)</td>
<td>[0.102]</td>
<td>[0.160]</td>
</tr>
</tbody>
</table>

The following regressions are estimated:

(1) \[ \text{OUTCOME} = \alpha_0 + \alpha_1 \text{ACCUM} + \epsilon; \]
(2) \[ \text{BLAME} = \gamma_0 + \gamma_1 \text{ACCUM} + \epsilon; \]
(3) \[ \text{OUTCOME} = \lambda_0 + \lambda_1 \text{BLAME} + \epsilon; \]
(4) \[ \text{OUTCOME} = \delta_0 + \delta_1 \text{ACCUM} + \delta_2 \text{BLAME} + \epsilon; \]

where ACCUM is the accumulating nature of the audit difference, which is coded as 0 for participants in the non-accumulating condition and 1 for participants in the accumulating condition; BLAME is auditor participants’ response to the survey question asking “With regards to the audit difference you discussed with the client, how did prior decisions by your firm (i.e., waiving immaterial audit differences) lead to this need for an audit adjustment”, answered on an eleven-point Likert scale anchored by (1) “Key Cause” and (11) “No Effect”; OUTCOME is the negotiated adjustment amount.
### TABLE 4

**H1 Regression Analyses for Financial Officers’ Perceived Blame to the Audit Firm as Mediator**

<table>
<thead>
<tr>
<th>Equation</th>
<th>Dependent Variable</th>
<th>ACCUM</th>
<th>BLAME</th>
<th>Model F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation (1)</td>
<td>OUTCOME</td>
<td>-1,866,667 (-4.104)</td>
<td>16.844</td>
<td>.445</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-4.104)</td>
<td>[0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (2)</td>
<td>BLAME</td>
<td>-2.902</td>
<td>8.279</td>
<td>.283</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-2.877)</td>
<td>[0.009]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (3)</td>
<td>OUTCOME</td>
<td>146,412</td>
<td>1.864</td>
<td>.082</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.365)</td>
<td>[0.187]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (4)</td>
<td>OUTCOME</td>
<td>-2,010,299 (-3.675)</td>
<td>8.241</td>
<td>.452</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-3.675)</td>
<td>[0.002]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following regressions are estimated:

1. \( \text{OUTCOME} = \alpha_0 + \alpha_1 \text{ACCUM} + \epsilon; \)
2. \( \text{BLAME} = \gamma_0 + \gamma_1 \text{ACCUM} + \epsilon; \)
3. \( \text{OUTCOME} = \lambda_0 + \lambda_1 \text{BLAME} + \epsilon; \)
4. \( \text{OUTCOME} = \delta_0 + \delta_1 \text{ACCUM} + \delta_2 \text{BLAME} + \epsilon; \)

where ACCUM is the accumulating nature of the audit difference, which is coded as 0 for participants in the non-accumulating condition and 1 for participants in the accumulating condition; BLAME is financial officer participants’ response to the survey question asking “With regards to the audit difference you discussed with the auditor, how did prior decisions by the auditor (i.e., waiving immaterial audit differences) lead to this need for an audit adjustment”, answered on an eleven-point Likert scale anchored by (1) “Key Cause” and (11) “No Effect”; OUTCOME is the negotiated adjustment amount.
### Table 5

**H2 Regression Analyses for Auditors’ Perceived Directional Adjustment Importance as Mediator**

<table>
<thead>
<tr>
<th>Equation</th>
<th>Dependent Variable</th>
<th>DIRECT</th>
<th>IMPORT</th>
<th>Model F</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation (1)</td>
<td>OUTCOME</td>
<td>-644,872 (-2.378)</td>
<td>5.656</td>
<td>.197</td>
<td></td>
</tr>
<tr>
<td>Equation (2)</td>
<td>IMPORT</td>
<td>-2.987 (-3.248)</td>
<td>10.553</td>
<td>.315</td>
<td></td>
</tr>
<tr>
<td>Equation (3)</td>
<td>OUTCOME</td>
<td>64,189 (1.162)</td>
<td>1.351</td>
<td>.055</td>
<td></td>
</tr>
<tr>
<td>Equation (4)</td>
<td>OUTCOME</td>
<td>-661,029 (-1.974)</td>
<td>2.710</td>
<td>.198</td>
<td></td>
</tr>
</tbody>
</table>

The following regressions are estimated:

1. $\text{OUTCOME} = \alpha_0 + \alpha_1\text{DIRECT} + \varepsilon;$
2. $\text{IMPORT} = \gamma_0 + \gamma_1\text{DIRECT} + \varepsilon;$
3. $\text{OUTCOME} = \lambda_0 + \lambda_1\text{IMPORT} + \varepsilon;$
4. $\text{OUTCOME} = \delta_0 + \delta_1\text{DIRECT} + \delta_2\text{IMPORT} + \varepsilon;$

where DIRECT is the income direction of the audit difference, which is coded as 0 for participants in the income decreasing condition and 1 for participants in the income increasing condition; IMPORT is auditor participants’ response to the survey question asking “Consider whether the adjustment in this case increased or reduced the bottom line income of Wareham, Inc. Assuming the audit difference identified in this case occurred for one of your clients, rate the following statement: Having the client adjust income to reflect this audit difference would be a priority on this engagement”, answered on an eleven-point Likert scale anchored by (1) “Very Low Priority” and (11) “Very High Priority”; OUTCOME is the negotiated adjustment amount.
H2 Regression Analyses for **Financial Officers’ Perceived Directional Adjustment Importance** as Mediator

<table>
<thead>
<tr>
<th>Equation</th>
<th>Dependent Variable</th>
<th>DIRECT</th>
<th>IMPORT</th>
<th>Model F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equation (1)</td>
<td>OUTCOME</td>
<td>-644,872</td>
<td>5.656</td>
<td>.197</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-2.378)</td>
<td>[0.013]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (2)</td>
<td>IMPORT</td>
<td>-3.756</td>
<td>24.521</td>
<td>.516</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-4.952)</td>
<td>[&lt;0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (3)</td>
<td>OUTCOME</td>
<td>167,862</td>
<td>13.261</td>
<td>.366</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.642)</td>
<td>[0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equation (4)</td>
<td>OUTCOME</td>
<td>-29,571</td>
<td>163,800</td>
<td>.366</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.083)</td>
<td>(2.418)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.934]</td>
<td>[0.024]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following regressions are estimated:

1. \( \text{OUTCOME} = \alpha_0 + \alpha_1 \text{DIRECT} + \epsilon; \)
2. \( \text{IMPORT} = \gamma_0 + \gamma_1 \text{DIRECT} + \epsilon; \)
3. \( \text{OUTCOME} = \lambda_0 + \lambda_1 \text{IMPORT} + \epsilon; \)
4. \( \text{OUTCOME} = \delta_0 + \delta_1 \text{DIRECT} + \delta_2 \text{IMPORT} + \epsilon; \)

where DIRECT is the income direction of the audit difference, which is coded as 0 for participants in the income decreasing condition and 1 for participants in the income increasing condition; IMPORT is **client** participants’ response to the survey question asking “Consider whether the adjustment in this case increased or reduced the bottom line income of Wareham, Inc. Assuming the audit difference identified in this case occurred for your company, rate the following statement: *Having my company adjust income to reflect this audit difference would be a priority for my auditor*”; answered on an eleven-point Likert scale anchored by (1) “Very Low Priority” and (11) “Very High Priority”; OUTCOME is the negotiated adjustment amount.
## TABLE 7

### Mean (p-value) [t-stat]

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>(1) Non-Accumulating Income Decreasing</th>
<th>(2) Accumulating Income Decreasing</th>
<th>(3) Accumulating Income Increasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiated adjustment</td>
<td>$3,650,000 (0.001)* [4.090]</td>
<td>$1,783,333 (0.013)* [2.378]</td>
<td>$1,138,462</td>
</tr>
<tr>
<td>First offer</td>
<td>$5,109,091 (0.023) [2.448]</td>
<td>$3,825,000 (0.656) [0.451]</td>
<td>$3,486,538</td>
</tr>
<tr>
<td>Minimum required</td>
<td>$3,445,455 (0.010) [2.820]</td>
<td>$1,666,667 (0.773) [0.292]</td>
<td>$1,466,923</td>
</tr>
<tr>
<td>adjustment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected adjustment</td>
<td>$4,290,910 (&lt;0.001) [5.179]</td>
<td>$1,895,000 (0.689) [0.405]</td>
<td>$2,140,000</td>
</tr>
</tbody>
</table>

Consistent with the hypotheses, we test whether (1) < (2) and whether (2) < (3). Statistics are presented under column (1) and (3), respectively.

*one-tailed due to directional hypotheses.